

CLAMS

Claim 1

A backlight device for a liquid crystal display, comprising at least a light diffuser plate, a light source disposed at a backside of the light diffuser plate, and a reflector for reflecting light from the light source, wherein a liquid crystal panel is disposed at a frontside of the light diffuser plate, and direct light from said light source and reflected light from said reflector diffuse into and transmit through said light diffuser plate to illuminate said liquid crystal panel from backside, said backlight device for a liquid crystal display being configured such that:

said light source radiates ultraviolet rays and heat along with visual light, and

said light diffuser plate is constrained at at least one side thereof, and has a saturated water absorption rate of not more than 0.9% as well as a color difference ( $\Delta E$ ) of not greater than 2.0 as specified in JIS K 7105 after being exposed for 500 hours to an artificial light used for an artificial light source test specified in JIS K7350-2.

Claim 2

The backlight device for a liquid crystal display according to claim 1, wherein said light diffuser plate consists of light diffusive (meth)acryl-styrene copolymer resin.

Claim 3

The backlight device for a liquid crystal display according to claim 1 or 2, wherein said light diffuser plate contains 0.005 to 2 parts by mass of an ultraviolet absorbing agent with respect to 100 parts by mass of the resin constituting said light diffuser plate.

Claim 4

The backlight device for a liquid crystal display according to any of claims 1 to 3, wherein the light diffuser plate contains 0.1 to 20 parts by mass of particulates with

a particle diameter 1 to 30  $\mu\text{m}$  with respect to 100 parts by mass of the resin constituting said light diffuser plate.

Claim 5

The backlight device for a liquid crystal display according to any of claims 1 to 4, wherein a maximum value of light energy at wavelengths 300 to 400 nm at a surface of the light-source side of the light diffuser plate is not less than 20  $\mu\text{W}/\text{cm}^2$ .

Claim 6

The backlight device for a liquid crystal display according to any of claims 1 to 5, wherein the maximum value of light energy at wavelengths not greater than 300 nm at the surface of the light-source side of the light diffuser plate is not less than 50  $\mu\text{W}/\text{cm}^2$ .